



En LOMISA nos centramos en los proyectos con la finalidad de mejorar la eficiencia operativa de un centro de salud. Hacemos frente, junto a nuestros clientes, al reto de modernizar sus instalaciones y servicios, proporcionando tecnologías vanguardistas, procedimientos probados y protocolos clínicos actualizados.

Nuestra visión a largo plazo siempre mejora la calidad de vida de los pacientes, que deberían beneficiarse del uso de las instalaciones y servicios. Mediante una estrecha colaboración con los profesionales y gestores del sector sanitario, proporcionamos planes, proyectos ejecutables y soluciones materiales para alcanzar los objetivos de sus instituciones públicas o privadas.

Al trabajar a nivel de gobiernos o administraciones centrales, también consideramos la oportunidad de reforzar el funcionamiento de la atención primaria para facilitar o ampliar el acceso de la población a los estándares apropiados de cuidado preventivo, diagnóstico y crítico. Nuestra estrategia para lograr esos objetivos es la potenciación de los actores claves, para que hagan lo correcto.

Nuestro equipo incluye a gestores e ingenieros con una gran experiencia en el sector hospitalario, ampliamente cualificados en el uso de la tecnología médica y la gestión de los servicios clínicos, que reciben el apoyo de una extensa red internacional de asesores clínicos de primer nivel para cubrir cualquier especialidad, desde los servicios clínicos centrales del hospital a las terapias modernas y complejas.

En **LOMISA** proporcionamos una amplia gama de servicios (instalación, ajuste, puesta en marcha, formación técnica y al usuario, mantenimiento preventivo y correctivo durante el periodo de garantía o el ciclo de vida útil) al presupuestar todas nuestras soluciones de equipamiento, como parte de nuestro fuerte compromiso con el cliente.

Otros equipamientos que suministramos:

- Anatomía patológica
- Esterilización y desinfección
- Rehabilitación
- Imagenología
- Laboratorio
- Medicina deportiva
- Oncología
- Quirófanos
- Refrigeración

NUESTRAS MARCAS













Comdek:

Euroclinic



Sibelmed



😂 BD



































SOEHNLE





















Audiometry & Respiratory

Audiometría Respiratorio

SELECCIONE EL PRODUCTO QUE ESTÁ BUSCANDO

AUDIOMETRÍA

Timpanómetro

Audiómetros

Prueba de audiología pediátrica estilo boel

Cabinas audiométricas

RESPIRATORIO

Espirómetros

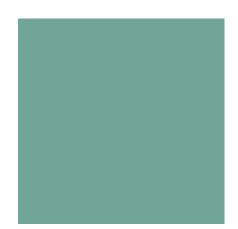
Noseclip

Filtro bacteriano

Dispositivo de ejercicio pulmonar

Aerosol

Monitor de apnea del sueño



Audiometría Respiratorio

MT 10 - HANDHELD IMPEDANCE TYMPANOMETER

• 33665 MT10 - HANDHELD TYMPANOMETER

• 33666 MT10 - HANDHELD TYMPANOMETER WITH IPSI-REFLEX Professional handheld tympanometer for setting fast and

reliable testing in an easy and cost effective way.

Objective analysis

Fast and easy to operate and provides objective measures that cannot be obtained by otoscopy alone.

Easy and fast tympanograms

Results can be obtained with little efforts and with no response required from the patient. This is especially beneficial when dealing with difficult-to-test patients or small children.

Clinical application

Suitable for diagnostic use as tympanometer and (33666 only) reflex responses are all recorded with great detail. You can detect otitis media (a major cause of temporary or permanent hearing impairment in children), a perforated eardrum, cholesteotomas and certain neurological disorders. You can also check tympanostomy tubes and follow up on post medical treatments.

Ipsilateral Acoustic Reflex (33666 only)

Four different reflex tests at 500, 1,000, 2,000, 4,000 Hz may be performed per ear using either fixed or automatic intensity selection. Actual reflex characteristics are displayed on the screen.

30 patients in memory
Can hold test results of up to 30 patients, allowing to screen a large group of patients and print out the data at a later time. PC-integration with optional infrared USB interface and software. Full data-transfer to PC

33667 INTERFACE USB ADAPTER AND SOFTWARE BY IRDA PORT



Interacoustics

Supplied with handle, set of 139 disposable ear-tips (mixed sizes) 4x1.5 V battery and manual in GB, DE, FR, IT, ES, SE, GR, PT, DK, FI, CZ, PL, LT, EE, HU, NL, NO, IS, RO, MK.

- -400 to +200 daPa

- ipsi-reflex (33666 only)
- 30 patient memory
- PC integration

The MT10 is ergonomic to hold but also offers the possibility of using the included handle to make it even more stable and lightweight as it can rest on your arm during the measurement.

Size: 19x8x4 cm excluding probe (length with probe 22.5 cm) Weight 285 g without battery

- 33668 BET55 SET OF DISPOSABLE EAR-TIPS box of 139 mixed sizes
- 33669 SANIBEL MPTII PORTABLE THERMAL PRINTER
- 33670 THERMAL PAPER ROLLS box of 3

TECHNICAL SPECIFICATIONS

Tympanometry Peak compliance; peak pressure, gradient; equivalent ear canal volume Analysis performed:

Probe tone: Pressure levels:

Ear volume measurement range: 0.2 ml to 5 ml Sweep speed:

Pressure limits (safety shut off): Reflex measuremets (33666 only)

Measurement mode: Reflex tone levels: Four reflex levels:

Reflex analysis:

+200 daPa to -400 daPa

Typically 200-300 daPa/sec;

depending on ear & cavity volume +600 to -800 daPa

ipsilateral

500 Hz, 1 kHz, 2 kHz, 4 kHz 100 dB with 5 dB or 10 dB steps; 95 dB, 90 dB or 85 dB with 5 dB steps Reflex pass/refer at each level tested; Maximum amplitude of each reflex (seen on printed report and PC report); Pressure at which reflex was performed

Data management Data storage:

30 records. Any recording can be stored once the tympanogram is viewed

Data held:

Patient Initials, Tympanogram and Reflex graphs and analysis for Left and/or Right Ear, Time and Date of recording, which ears were tested, whether or not the record has been printed and sent to a PC, parameters printed and/or sent to a PC, parameters used for analysis

Other data

Internal backup: Battery Lifetime: Supported printer: Interface:

Information printed:

Safety standards: Impedance standard: IEe 60645-5, Type 2 Tympanometer

>30 days without main batteries fitted Approx. 400 tests (Alkaline AA batteries) Martel MCP8830 or Sanibel MPTII

Infra-red, IrDA hardware, 9600 baud Space for patient and clinician's details, Tympanogram analysis parameters, Tympanogram, Reflex analysis parameters, Reflex graph, S. N. of device, Last and Next Due Calibration dates IEC 60601-1. EMC: IEC 60601-1-2

Interacoustics

PA5 PEDIATRIC PORTABLE AUDIOMETER

33601 PA5 AUDIOMETER

 33602 TDH39 AUDIOMETRIC HEAD PHONE Paediatric portable audiometer with air conduction, free-field

and visual stimulation capabilities. By means of a headphone it can be also used as a regular screening audiometer for adults. PA5 helps doctors in evaluating the auditory behaviour in neonates and infants till 24 months by means of specific tests: Auropalpebral Reflex (APR) test

APR test is a startle reflex of the eyelid elicited by relatively strong sounds that can be performed on neonates from the day of birth. It is not based on co-operation with the newborn child.

Conditioned Orientation Response (COR) test Based on the "Orientation Reflex", a natural reflex movement elicited by sound or visual stimulation. If the visual stimulation elicits a reflex which is conditioned by a tone, the child will look towards the visual stimulation as soon as the tone is heard. If the conditioning is effective the child will look in the direction of the sound source even before the visual stimulation is presented.

Visual Reinforcement Audiometry (VRA) test VRA test is an extension and modification of COR, where the cooperation with the child is less important. Not only the sound

localisation orientation reflex are accepted but also four other reactions: reflex reactions (body and face), search reactions, orientation reactions and spontaneous reactions.

Reflex audiometry and maturation of auditory response tests Different stimuli are presented in terms of intensity, frequency, duration, direction of sound in order to elicit proper reactions like waking-up, crying, astonishment, direct sound localization.



TECHNICAL SPECIFICATIONS

Frequencies: Stimuli: Intensities:

500, 1,000, 2,000, 3,000, 4,000 Hz
Warble tone, NB and WN
Distance 50 cm: 20/30-80dB HL in 10dB steps, for Warble Tone and WN 10/20-70dB for NB

Distance 16 cm: increases intensity by 10 dB LxWxH: 25x7x5 cm - 360 g Dimensions - weight: LxWxH Power supply: 3AA batteries (included)

Power supply:

BOEL STYLE PEDIATRIC AUDIOLOGY TEST

• 33599 GIMA AUDIOTEST - pediatric audiology test for early detection of childhood deafness

The Boel test is a unique screening tool that tests the hearing abilities and child's response to a sound stimulus, even at an early age (between 6 to 10 months). GIMA audiotest is based on the BOEL test both for the ergonomics (designed to be held in the palm of the hand not visible to the child) and the standard sound of the bells. The two sound stimuli emitted by the audiometer reproduce a dull

low-frequency tone located at about 125-150 Hz and an acute high-frequency tone located at about 5.0-5.1 kHz in exactly the same way as the bells of the Boel test (amplitude 86dBA; 96dBA). Testing the child's response to these highly significant thresholds. Easy to use, with only two buttons for the selection of two frequencies, lightweight and battery-powered. 33599





AUDIOMETRIC BOOTHS - CONFORM TO 93/42/CEE - 2007/47/CE - Class I



• 33650 PRO 25 - 96x96x197 cm Portable, lightweight, sound proof booth, easy to install in few minutes. Interior finishing made of acoustic pyramid foam in anthracite grey. External finishing made of highly resistant, fire proof washable panel. Module for cable connection included. Made in Italy.

• 33651 TABLE - 79x50 cm

ACOUSTIC INSULATION							
Hertz		125	250	500	1000	2000	4000
PRO 25							
PRO 28	dB	21.7	25.6	32.6	36.2	34.0	41.1
PRO 30	dB	23.4	24.1	27.8	34.5	31.3	36.4

36.2 dB at 1,000 Hz OUTSTANDING SOUNDPROOF LEVEL 33649 + 33651

• 33649 PRO 28F - 96x96x197 cm New compact booth with an outstanding level of sound proofing and excellent acoustic thanks to innovative materials. Internal finishing made of fire proof, washable and very resistant fabric. Internal ventilation system. External finishing made of highly resistant, fireproof, washable panel. Module for cable connection included. Made in Italy.

33651 TABLE 79x50 cm



- 33653 PRO 30 132x132x242** cm
- 33655 PRO 30 211x107x242" cm
- 33656 PRO 30 211x211x242**
- 33657 PRO 30 size on request

available any size from 1x1 to 3x3 Range with different sizes, with high noise reduction and ventilation system. External finishing made of highly resistant, fireproof, washable panel and aluminium frame. Module for cable connection included. Made in Italy.

- 33651 TABLE 79x50 cm
- · 33652 RAMPS for wheelchair access

		al .						
	TI	CHNICAL SPEC	IFICATIONS					
	33650	33649	33654	33653	33655	33656		
External size (cm):	96x96xh 197	96x96xh 197	107x107xh 242**	132x132xh 242**	211x107xh 242**	211x211xh 242**		
Internal size (cm):	81x81xh 180	81x81xh 173.5	92x92xh 201	117x117xh 201	196x92xh 201	196x196xh 201		
Door size cm:	55xh 168	55xh 168	75xh 200	75xh 200	75xh 200	75xh 200		
opening:	Left/Right	Left/Right	-	Rig	ght" —	1		
Windows size cm:	56xh 56	56xh 56	-	56x	h 88			
material:	-		-2 - crystal insula	ating safety glass				
Wall thickness cm:	7.5	7.5	7.5	7.5	7.5	7.5		
Weight (kg):	198	233	255	317	356	552		
Ventilation:	no	yes	yes	yes	yes	yes		
Tested noise reduction dB at 1,000 Hz:	30.8	36.2	1	34	1.5 —			
Internal illumination power V-Hz:	Internal illumination power V-Hz:							
Norms:		Class I Me	dical Devices Eu	ropean Directive	93/42 CEE			
*Left opening available on request	"Height inclu	udes air ventilatio	n system (25 cm,)				



SINGLE USE TYMPANOMETER EARTIPS - FOR MOST BRANDS



SANIBEL™ ear tips were designed for use with acoustic immittance instruments and otoacoustic emission system. Made of a soft and sticky biocompatible material, these ear tips greatly improve the ease of obtaining and keeping a good seal, allowing the tester to quickly move on to other tasks. Available in different sizes, with different shapes (mushroom and flanged ear tips for infants). The complete range makes it possible to accomodate all ear canal shapes and sizes. All Sanibel™ ear tips are latex free.

code	SANIBEL™ AZE MUSHROOM EAR TIPS	Minimum order
53501 53502 53503 53504	Ear tip 6 mm - violet Ear tip 7 mm - yellow Ear tip 9 mm - green Ear tip 10 mm - light blue Ear tip 11 mm - white Ear tip 13 mm - yellow	bag of 100 pcs bag of 100 pcs
Grason-S	VERIFIED COMPATIBILITY FOR SANIBEL Stadler® Tympstar'*	™ AZE

5 Ear ti	o 13 mm - yellow	bag of
VE	RIFIED COMPATIBILITY FOR SAN	BEL™ AZE
on-Stadler® acoustics®	Tympstar™ AT235™ & AT235h™ with black pro AA222™ & AA220™ with black pro old MT10™	obe tip
olex®	MI24 [™] , MI26 [™] , MI34 [™] , MI44 [™] with All tympanometers	n black probe tip

Intera

Maico Kamp

code	SANIBEL	" ADI FLANGED INFANT EAR TIPS	order
53515 53516 53517	Ear tip 4	3-5 mm - red 4-7 mm - blue 5-8 mm - yellow	bag of 100 pcs bag of 100 pcs bag of 100 pcs
code	SANIBI	EL™ ADI MUSHROOM EAR TIPS	Minimum order
53520 53521 53522 53523 53524 53525 53526 53527	Ear tip 8 Ear tip 9 Ear tip 1 Ear tip 1 Ear tip 1 Ear tip 1	7 mm - blue 3 mm - yellow 9 mm - green 10 mm - red 11 mm - blue 12 mm - yellow 13 mm - green 14 mm - red	bag of 100 pcs bag of 100 pcs
	VERI	FIED COMPATIBILITY FOR SANIBEL"	'ADI
Amplivo: Interaco		Otowave [™] with clear (Type 1) probe AT235 [™] & AT235h [™] with clear probe tip AA222 [™] & AA220 [™] with clear probe tip Eclipse [™] and MT10 [™] with clear probe tim M124 [™] , M126 [™] , M134 [™] , M144 [™] with clear	adapter ip, Titan™
MEDRx® Grason-S	itadler®:	easyTimp™ - Otowave™ - Ero-scan plus™ Otowave™ Corti™	' - easyScreen™

SCREENING AUDIOMETER

DIAGNOSTIC AUDIOMETER





 53550 AMPLIVOX 116 SCREENING AUDIOMETER - air conduction Combines style and functionality, the ideal manual screening audiometer for primary care, school and workplace. It offers a comprehensive air conduction threshold facility at very affordable price.

- pure tone, continuous, pulsed and warble tones
- threshold retention function
- talk forward function
- 125 to 8,000 Hz test frequency
- -10 to 100 dBHL

Supplied with audiometric headset, patient response switch, audiogram cards (box of 50) main power adaptor, carrying case and manual (GB, IT, ES, on request FR, SE, PT).
• 53555 PELTOR INSULATION HEADBAND

- 53556 AUDIOGRAM CARDS box of 50





- 53551 AMPLIVOX 240 DIAGNOSTIC AUDIOMETER air, bone, masking Cost-effective diagnostic audiometer, ideal for desktop and mobile use
- **USB** connectivity
- threshold retention function
- single, pulsed or warble tone preset
- 11 test frequencies: 125 to 8,000 Hz (AC), 250 to 8,000 Hz (BC) - -10 to 120 dBHL range (AC), -10 to 70 dBHL (BC), 90 dBHL max (250 to 4,000 Hz) insert masking output
- automatic AC test functionality

Supplied with audiometric headset, bone conductor headset, patient response switch, audiogram cards (box of 50), main

power adaptor, carrying case and manual (GB, IT, ES, on request FR, SE, RU, PT).
• 53555 PELTOR INSULATION HEADBAND

- 53556 AUDIOGRAM CARDS box of 50
- 53557 INSERT FOR MASKING



2 lines of 24 characters backlit display

SCREENING DIAGNOSTIC AND CLINICAL 2 CHANNEL AUDIOMETERS



• 33623 SIBELSOUND 400-A SCREENING AUDIOMETER - air conduction 33624 SIBELSOUND 400-AOM DIAGNOSTIC AUDIOMETER - air + bone + masking

 33626 SIBELSOUND 400-SUPRA CLINICAL AUDIOMETER air + bone + mask + supraliminar tests + W50 software The SIBELSOUND 400 is a two-channel digital audiometer based on DSP processing. This audiometer is designed for quick and easy audiometric exploration of hearing thresholds and screening tests, such as suprathreshold pure tone tests (FOWLER-ABLB, TONE DECAY, WEBER, LUSCHER, ...).

Air conduction (TDH 39): 125 - 8,000 Hz or HF: 8,000 -20,000 Hz with optional HDA 200

 Levels: AC (-10 to 120 dB HL) / BC (-10 to 70 dB HL) / speech (-10 to 100 dB HL) free field (-10 to 80 dB HL)

- Masking levels (manual or synchronized): NBN AC (-10 to 100 dB HL) NBN BC (-10 to 70 dB HL) white & speech (-10 to 100 dB SPL)
- Tone: continous, pulse, anternate, amplitude modulation.
 Level increases: 5 (A-AOM), 1 or 5 (SUPRA)

- Frequency precision: ±1%/ level precision ±2% db SPL
 Automatic calculation of hearing loss and diagnosis (COUNCIL, IMSS MEXICO, ELI, SAL, KLOCKHOFF, MOH, OTHERS ...)
- Direct USB connection to PC to W50 audiometry software for viewing, storage, transmission, analysis and introduction of
 - audiometric tests (Windows® environment).
 - 33628 INTERCOM KIT (headphone + microphone)
 33621 INSULATION DEVICE for air conduction phone
 33629 AUDIOMETRY SOFTWARE W50

•	33629 AUDIOWETRY SUP	IVVARE	VVSU	
	SIBELSOUND	400 FEATI	URES	
		Α	AOM	SUPRA
	Audiometry type 4	screening	3diagnostic	2 clinical
	Air conduction TDH 39	•	•	•
	Bone conduction B71		•	•
	Masking by white narrow			
	band & speech noise			
	Sisi test			1960
	Supraliminar tests			•
	Speechaudiometry +			
	Intercom kit	optional	optional	•
	Musical frequencies			•
	Intercom data base	150 tests	1,000 tests	1,000 tests
	USB connectivity	•	•	
	W50 audiometry software	optional	optional	•
	User manual English, Italian	•	•	•
	(available on request French or Spanish)			

		F	REQUE	NCIE	SAND	LEVE	LS					
STANDARD FREQUENCY	125	250	500	750	1,000	1,500	2,000	3,000	4,000	6,000	8,000	HZ
MUSICAL FREQUENCY	131	262	523	8.53	1,047	(-)	2,093	=	4,186	0.70	8,372	HZ
Air conduction (THD 39)	80	100	120	120	120	120	120	120	120	110	110	dB HL
Bone conduction (B 71)	_	50	60	60	70	70	70	70	70	55	- 2	dB HL
Free field	9-4	70	80	80	80	80	80	80	80	80	=	dB HL
MASKING NOISE Narrow bandwidth AC Narrow bandwidth BC	60	80 50	100	100	100 70	100	100	100	100	100	90	dB HL
White AC Speech	-	50	00	60	70	100 100	70	70	70	-		dB SPI dB SPI
LOGO-AUDIOMETRY Air conduction Free field				8	0 dB at	100 1m fron	n the p	atient				dB SPI dB SPI
Minimum levels All options	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	dB HL
			mmuni						- 14/50	A diamen	- Fe 11/5-	

Print directly to a USB printer or connect to W50 Microsoft Windows Audiometry Software.

Audiometry software:

It allows to manage patient database, display graphically results, compare tests,.. It also allows to input data performed by other audiometers, show automatic diagnosis (council IMSS,...). Compatible Windows 10

PC OR PC-iPAD CONTROLLED PORTABLE AUDIOMETERS PICCOLO PORTABLE AUDIOMETERS

Piccolo is a basic diagnostic audiometer offering air, bone and speech audiometry functions.

Piccolo can be controlled either from a computer running Windows or, for the first time ever, from an iPad®

Lightweight, compact design, powerful, user-friendly software and Noah connectivity combine to make Piccolo the ideal choice for professionals on the move.

three different models available:

Class EN 60645-1, ANSI S3.6

Maximum output intensities

Automatic audiometry Speech audiometry

Type of device

Output

Masking

Warble tone

Pulsed tone

Frequency range

Attenuator step

Speech inputs

Connection to PC

Controlling software

Connection to iPad

Operating voltage

Controlling app

Dimensions

Weight

Talk over

Basic (AC only) for Pc use
Plus (AC/BC) for Pc or Pc-iPad® use (Aero version)

Speech (AC/BC/Live Speech) for Pc-iPad® use

iPad® control (includes Aero option, 33616, 33618 only) through the Maestro App. Wireless Bluetooth connectivity

Piccolo Basic

Pc control

4-screening

AC

NBN

Yes

0.5 Hz, 1 Hz, 2 Hz

125 - 8,000 Hz

AC: -10 to 120 dB HL

5 dB

HW auto threshold

No

External microphone

USB [driverless]

300 q (10.6 oz)

100-240 V, 50/60 Hz

- computer control through the dedicated Noah or Daisy module. USB connection port





0.5 Hz, 1 Hz, 2 Hz	
125 - 8,000 Hz	
AC: -10 to 120 dB HL	
BC: -10 to 80 dB HL	
5 dB	
HW auto threshold	102
Yes	
EXT1, EXT2, Mic	
External microphone	4
USB [driverless]	3
Bluetooth 4	
Maestro (App Store)	200
300 g (10.6 oz)	



25.4 ST. 10 ST. 17.		Christian Christian
code	SCREENING AND DIAGNOSTIC AUDIOMETERS	Management
33613 33615 33616 33618		PC PC PC + iPad
550.0	air + bone + live speech* + mask	PC + iPad

- B71 bone vibrator (33615/6/8 only) Patient response switch - Clip-on microphone for operator -to-patient communication

TDH-39 supra-aural headphones

100-240 V, 50/60 Hz

- Jack Lable (0 3.5 mm) -33618 only - Inventis Daisy Patient Record Mana-ger, with Daisy Maestro module - Noah Maestro module

- USB connection cable Medical grande power supply

User Manual

- Jack/jack cable (Ø 3.5 mm) -

*Speech material IT standard, available on request FR.

BELL PLUS DIAGNOSTIC AUDIOMETER

TECHNICAL SPECIFICATIONS

Piccolo Plus

PC (33615) or Pc and iPad® control (33616)

3-diagnostic

AC, BC

NBN

Yes

0.5 Hz, 1 Hz, 2 Hz

125 - 8,000 Hz

AC: -10 to 120 dB HL

BC: -10 to 80 dB HL

5 dB

HW auto threshold

No

External microphone

USB [driverless]

Bluetooth 4 (only 33616)

Maestro (App Store)

16x16x3cm (16.3x6.3x1.2 in)

300 g (10.6 oz)

100-240 V, 50/60 Hz

Daisy or Noah with Maestro module

• 33635 BELL PLUS DIAGNOSTIC AUDIOMETER - air + bone + mask + software DAISY - MAESTRO

Bell is a basic diagnostic audiometer performing fast and accurate air and bone conduction threshold examinations. Simple operation, fast and reliable automatic examination mode, user-friendly interface and easy portability make Bell the ideal instrument for private clinics, multi-specialist clinics and occupational medicine application.

- pure tone audiometry in AC and BC
- hughsone-Westlake auto threshold test
- colour graphic display.
- internal memory for 100 patients
- cost effective solution



- supplied with air conduction phone and vibrator for bone conduction.

Made in Italy.

Maestro Software interface

The Maestro module is the software interface of Bell Plus audiometer. When it is connected to PC via USB you can see real time progress of the exam on the display and then download the data. It also allows full control of the audiometer from computer.

STANDARD ACCESSORIES

- TDH-39 supra-aural headphones

- B71 bone vibrator

Dimensions - weight

- Plastic cover sheet

- Medical grade power supply

32x32x9 cm (12.6x12.6x3.5 in) - 1.8 kg (4.0 lbs)

- User Manual

- Patient response switch **TECHNICAL SPECIFICATIONS**

Type of device Hybrid audiometer Class (EN 60645-1, ANSI 53.6) 3 diagnostic Output AC, BC NBN, WN Masking Insert masking earphone Yes Warble tone Yes Pulsed tone 0.5 Hz, 1 Hz, 2 Hz Frequency range 125 - 8,000 Hz AC: -10 to 120 dB HL Maximum output intensities BC: -10 to 80 dB HL Attenuator step 5 dR HW auto threshold Automatic audiometry Talk over Internal or external microphone Display type Colour graphic Display size resolution 4.3", 480x272 100 patients Internal memory 100-240 V, 50/60 Hz Operating voltage

SPIROTEL SPIROMETERS - BLUETOOTH OPTION

- 33471 SPIROTEL with WINSPIROPRO software
- 33472 SPIROTEL with Bluetooth and WINSPIROPRO software
- · 33473 SpO, PROBE adult optional
- 33410 MOÚTHPIECES int Ø 2,8 x ext Ø 3, h 6.5 cm



A pocket laboratory which integrates 4 devices in one:

- spirometer with touch screen display
- triaxial accelerometer with motion analysis for therapy monitoring
- intelligent 3D oximeter with on screen results (with 33473)
- e-diary for home care symptom control. Compatible with Qualcomm Life 2 net Hub

TECHNICAL SPECIFICATION

Data transmission: Memory capacity: Power supply:

Flow sensor:

Flow range:

Dynamic resistance:

Measured parameters:

Reading on PC with Winspiro PRO: same parameters as Spirobank G

SpO₂ range:

0-100% ±2% (50-100% SpO₂)

Pulse rate range:

20-254 BPM ±2BPM or 2%

USB 2.0 or Bluetooth Up to 10,000 tests - 300 hours oximetry (only with 33473) Lithium-ion 3.7 V, 1100 mAh rechargeable, for 40 hours measurements

DISPOSABLE AND RE-USABLE TURBINES FOR MIR SPIROMETERS

• 33507 DISPOSABLE TURBINE WITH INTEGRATED MOUTHPIECE - box of 60

Single patient use. Low cost and high accuracy. Individually packed to guarantee maximum hygiene. Easy to replace, no calibration needed.

Compatible with GIMA codes: 33509, 33511-14, 33518-22, 33527-29, 33530, 33532, 33534.

• 33526 RE-USABLE TURBINE - bayonet

Easy to replace, no calibration needed. Compatible with GIMA codes: 33511-14, 33518, 33520-22, 33528-32, 33534.

33526

33507



MOUTHPIECES FOR MOST SPIROMETER BRANDS

Paper mouthpieces (disposable) and plastic mouthpieces (re-usable for most brands of spirometers and peak flow. Paper mouthpieces are packed in individual transparent pouch.





		GIMA	PAPER MOUTHPLE	CES				
code	Sizes - cm Ø int x ext x h	Suitable for	uitable for GIMA codes Other brands					
33410	2.8x3x6.5	adult	33431, 33433,	Micromedical Vitalograph, Mir	box of 500			
33897	2.0X3X0.3	aduit	33471-2, 33512-14, 33518-22,	Ferraris (Koko legend) Cardiette (Pneumos 300)	dispenser of 100			
33411	2.0x2.2x6	paediatric	33528-32, 33534	Micromedical Vitalograph, Mir	box of 250			
33412	Plastic a	dapter	33411	Mir				
33506	2.6x2.8x6.5	adult	33480, 33484-7	Sibel	box of 100			
33494	1.9x2.1x7	paediatric	33486, 33487	Sibel*	box of 100			
33890	2.5x2.7x7	adult	-	Fukuda Sangjo, Thor	dispenser of 100			
33892	2.8x3.05x7	adult		Cosmed (Pony model)	dispenser of 100			
33898	2.8x3.05x7	adult	3.00	Cosmed (Pony model)	box of 500			
33895	3.03x3.3	adult	:=:	Sensormedics, Microcard	box of 500			
33899	2.42x2.6	adult	•	Sorin Lifewatch, Fukuda Denshi	box of 500			
		GIMA F	LASTIC MOUTHPI	ECES				
33432	1.7x2.1x5 2.7x3x5	adult/ped	33431, 33433	Ferraris				
33691		adult	33682-4, 6, 8	Thor	box of 10			

*Gimaspir A/B need adapter 33495

SPIROMETRY PAPERS

- 33492 MIR SPIROLAB PAPER roll 112mm x 25m Suitable also for SIBEL DATOSPIR 120 B, C, D, DATOSPIR Touch and GIMASPIR 120 models B, C, D.
- 33893 COSMED PONY PAPER roll 57 mm x 11 m box of 5 rolls
- 33894 COSMED PONY FX PAPER roll 112 mm x 13m box of 25 rolls Compatible also with Fukuda Spirosift.
- 33250 THERMAL PAPER roll 58 mm

Suitable for SIBEL DATOSPIR 120 A and GIMASPIR 120-A.

NOSECLIP

• 33474 NOSE CLIP

BACTERIAL FILTER

- 33525 BACTERIAL FILTER box of 50 for MIR, Medisoft spirometers
- 33557 SPIROGUARD BACTERIAL FILTER box of 50

Compatibility of Spiroguard Erich Jaeger Gmbh Ferraris Medical - P.K. Morgan Sensormedics Vitalograph

Masterlab and Masterscreen Autolink-Benchmark Transflo and USA Transfer System 2200 - 2400 - 2450 Wedge-Bellow-Alpha and Escort Spirometers

33474

BACTERIAL FILTER - MOUTHPIECE FOR MOST SPIROMETER BRANDS



BACTERIAL FILTER - MOUTHPIECE Disposable filter with anatomical shape to prevent bacterial and viral contamination. Easy to use, direct connection to spirometer one side, patient mouthpiece other side. Suitable for most of spirometers and devices. Class II A. Individually packed in trasparent bag. € 0476 Made in Italy.

E	ACTERIAL I	ILTERS - MOUTHPIECE	S - box of 100				
	Size - cm	Compatibility with					
code	Ø int x ext	GIMA codes	Other brands				
33884	2.75x3	33341, 33433, 33471-2, 33509-14, 33518-22, 33528-32, 33534	Micromedical, Vitalograph, Mir, Ferraris (koko legend), Cardiette (Pneumos 300)				
33885	2.75x3.1		Cosmed				
33886	2.95x3.4	(<u>a</u>	Customed, Jaeger				
33887	3.05x3.5	i i	Sensormedics, BTL, Thor, Morgan, Chest, Microgard				
33888	3.4x3.6	2	Medical Graphics				
33889	2.5x2.7		Fukuda Sangjo				

SMART ONE PEAK FLOW-FEV1

(€ 0476

33681

510 (K)

Health Canada

Graphic trends

of Peak Flow

and FEV1 which

can be shared

by email

• 33681 SMART ONE® - Peak Flow and FEV1 Manual in GB, FR, IT, ES, Ideal for monitoring respiratory illnesses

and in self management of Asthma, COPD, lung transplant care, cystic fibrosis and for use in clinical trials. Peak flow and FEV1 on your smartphone

Simple handheld wireless device that can be easily connected via Bluetooth to iOS and Android smartphones and tablets.

App (GB, IT) with an exclusive incentive for adult and children based on exhaled flow and volume that gives accurate and helpful results. Graphic trend of Peak Flow and FEV1

Measurements including option to flag any test session. Test results history with Peak Flow, traffic light health indicator, symptoms

scoring and notes. Low battery consumption. New turbine flowmeter with plastic mouthpiece For personal use, easy to remove for cleaning and hygienic. Made in Italy

 33896 REUSABLE MOUTHPIECE - plastic box of 10

• 33897 DISPOSABLE MOUTHPIECE - paper box of 100

TECHNICAL SPECIFICATION

General Power supply: Autonomy Connectivity Size - weight: Mouthpieces:

Spirometry Flow sensor:

Flow range: Volume accuracy: Measured parameters: Memory capacity:

batteries AAA 1.5 V included 1.000 tests

Low energy Bluetooth® 4.0 49x109x21 mm - 61 g (batteries included) Ø 30 mm (1.18 inch)

bi-directional digital turbine

±16 L/s ±3% or 50 ml FEV1, PEF Flow accuracy: ±5% or 200 mL/s

the application on the smartphone memorizes data

PEAK FLOW METERS



• 33431 POCKET PEAK - standard 60-800 l/min - cream

33433 POCKET PEAK - low 50-400 l/min - yellow

The Pocketpeak Peak Flow Meter is designed to provide simple and reliable home asthma management.

Lightweight and easy to use, it provides accurate and reliable measurements over time.

It is easy to clean and features a universal mouthpiece.

The EU/ATS Scale Pocket peaks will not only comply with the new European Standards but also with ATS (American Thoracic Society) Standards.

Standards range pocket peak will cover 60-800 litres/min, low range will cover 50/400 litres/min.

Package includes multilingual directions for use and peak flow diary, all packed in a cardboard box. Made in USA. Size 86x81x30 mm.

Weight 45 g. Standards: EN 13826:2003

• 33432 UNIVERSAL MOUTHPIECES - re-usable

In plastic, sterilizable, suitable both for adults and children.

• 33410 DISPOSABLE MOUTHPIECES - box of 500

LUNG EXERCISE DEVICE



33442 RESPIPROGRAM

Device to exercise the respiration through inspiration. The respiratory-exerciser Respiprogram helps the patient to recover the normal respiration after a chest or abdominal surgery. The device is composed of: 1 base, 3 small balls different in dimension and colours, 1 transparent central part divided into 3 rooms, 1 tube and mouthpiece. Each unit packed in single box. Made in Italy. User manual: GB, IT.

33445 TRI-BALL® - respiratory

The respiratory-exerciser Tri-Ball® helps the patient to recover the normal respiration after a chest or abdominal surgery. Single patient. User manual in GB, FR, DE, IT, ES.

33445

600/900/1200

Aerosol Holding Chamber



33438 POCKET CHAMBER

Now you can manage your asthma conveniently and effectively with a truly pocket-sized device, proven as effective as MDI chambers nearly twice its size. The Pocket Chamber delivers a high concentration of respirable aerosol, to help provide relief from asthma symptoms while capturing large particles and reducing unwanted side-effects.

- whistle alerts patients if inspiratory rate is exceeded

- effective, affordable alternative to expensive aerosol delivery
- flexible port accepts virtually any MDI's mouthpiece

TECHNICAL SPECIFICATION

Size: 108 x 47.5 mm Mouthpiece: 22 mm external Ø Materials: All Latex Free Silicone User Manual: GB, FR, IT, ES, DE, PT, NL, GR, TR

Volume: 110 ml Weight: 33 g Warranty: One year Made in USA

SPIROBANK II SMART - PORTABLE SPIROMETER WITH SPO, OPTION

 33512 SPIROBANK II SMART + WINSPIROPRO SOFTWARE Spirometer with 10.000 tests memory capacity, monochromatic LCD display, 6 keys membrane keypad. Battery power supply (3,7 V-1100 mA lithium) with an autonomy of approx. 50 hours of continuous use, rechargeable with USB port.

- cable (USB 2.0) or wireless (Bluetooth 4.0) connection

internal temperature sensor for automatic BTPS conversion

- high resolution graphic display

- automatic record of a whole spirometry session including best test

- USB cable, carrying case, CD manual (GB, FR, IT, ES, DE, PT) re-usable turbine and software included. Selectable internal software (GB, FR, IT, ES, DE, PT)

• 33514 SPIROBANK II SMART + WINSPIROPRO SOFTWARE + **OXYMETER**

Same as above with more than 300 hours of oximetric test records (SpO, % and pulse frequency tests).

Measured parameters: min, max and average SpO, %, min, max and average pulse frequency, SpO₂ total events, test duration, bradycardia events (<40 BPM), tachycardia events (>120 BPM), T90% (time passed with SpO₂ ≤89%), T89% (time passed with SpO₂ ≤ 88%)

• 33525 ANTIBACTERIAL FILTER - box of 50 disposable

• 33507 DISPOSABLE TURBINE with mouthpiece - box of 60

33526 REUSABLE TURBINE

• 33526 REUSABLE TURBINE
• 33410 MOUTHPIECES int. Ø 2.8 x ext. Ø 3, h 6.5 cm

TECHNICAL SPECIFICATIONS - SPIROMETRY

Measured parameters FVC, FEV1, FEV1/FVC%,
DTPEF, FEV 0.5, FEV0.5/FVC%, FEV0.75/
FVC%, FEV2, FEV2/FVC%, FEV3, FEV0.75/
FVC%, FEV2, FEV2/FVC%, FEV3, FEV5/FVC%, FEV6,
FEF25-75%, FEF75-85%, FEF, Vext, Lung Age,
EVOL, FIVC, FIV1, PIF, FIV1/FIVC%, FIF25%, FIF50%,
FIF75%, R50, PIF, IRV, VC, IVC, IC, ERV, FEV1/VC%,
VT, VE, Rf, ti, te, ti/t-tot, VT/ti, MVV

Flow sensor bi-directional digital turbine

Volume accuracy ±3% or 50 mL
Flow accuracy ±5% or 200 mL/s
Dynamic resistance <0.5 cm H₂O/L/s
Available tests: FVC, VC, IVC, MVV, PRE - POST
Connectivity USB 2.0, Bluetooth 4.0 Power supply Lithium-Ion 3.7V, 1100 mAh

TECHNICAL SPECIFICATIONS - OXIMETRY (33514 only)

Measurement method: red and infrared absorption Signal quality indicator: 0-8 segments on display SpO₂ range: 0-99% ±2 % between 70-99% SpO₂ Pulse rate range: 18-300 BPM ±2 BPM or 2% Memory capacity: up to 300 hours oximetry

WinspiroPRO software functions:

(GB, FR, IT, DE, ES, PT, PL, SE, NL, LV, CZ, TR, RU, CN, JP)

on-line PC connection with icon interface

real time Flow/Volume and Volume/time curves

bronchial challenge with FEV1 dose-response

paediatric incentive animations

integration with EPR systems

Lung Age Estimation

 data and graphs export also via e-mail

requirements:

XP, Seven, Vista, 8, 10

PC system





C E 0476

33518

Supplied with CD manual

(GB, FR, IT, ES, DE, PT, PL)

(GB, FR, IT, ES, DE, PT)

Internal software

Dimensions: 162x49x32 mm

Health Canada

SPIROBANK II BASIC



System requirements: Microsoft Windows Vista, 2000, XP, ME, Seven, 8, 10



33510 SPIROBANK II BASIC + WINSPIROPRO software Complete and rapid pocket spirometer for the General Practitioner to carry out spirometry testing anywhere. No calibration required, use disposable turbine FlowMIR with integrated mouthpiece (33507) or reusable turbine (33526).

- measures the most important spirometric parameters including: FVC, VC, IVC, IC, ERV, FEV1, FEV1%, PEF, FEF 25-75, FET, EVOL, TEST POST BD

- traffic lights for immediate test interpretation
- memory up to 10,000 tests
- rechargeable long life battery (40 hours continuous operation)
- real time tests via USB
- selectable display language and CD manual (GB, IT, ES, FR, DE, PT) Supplied with Winspiro PRO software, USB cable, 1 disposable turbine in a carriying bag.
- 33507 FLOWMIR DISPOSABLE TURBINE with integrated mouthpiece - box of 60 - spare
- 33526 REUSABLE TURBINE optional TECHNICAL SPECIFICATION

Power supply: 3.7 V, 110 mA lithium battery, USB rechargeable Keypad: 6-key membrane keyboard Display: LCD monochrome 160x80 pixel Flow accuracy: ± 5% or 200 ml/s whichever is greater Flow range: + 16 l/s Max volume: 10 l Volume accuracy: ± 3% or 50 ml whichever is greater Data transmission: USB 2.0 Made in Italy

SPIROBANK G WITH SOFTWARE



• 33518 SPIROBANK G + WINSPIROPRO software

stand alone spirometer with PC online operation

6,000 spirometry in memory

high legibility graphic display

- FVC, VC, IVC, MVV, PRE-POST BD
- advanced spirometry test interpretation
- Lung Age Estimation (ELA)
- ready for Telemedicine applications
- internal temperature sensor for automatic BTPS
- upgradable internal software via internet

Standard package includes USB cable, pouch, noseclip, battery, re-usable turbine and Winspiro PRO software.

TECHNICAL SPECIFICATION

Measured parameters: FVC, FEV1, FEV1/FVC%, FEV3, FEV3/FVC%, FEV6, FEV1/FEV6%, PEF, FEF25%, FEF50%, FEF75%, FEF25-75%, FET, Vext, Lung Age, FIVC, FIV1, FIV1/ FIVC%, PIF, VC, IVC, IC, ERV, FEV1/VC%, VT, VE, Rf, ti, te, ti/t-tot, VT/ti, MVV

Temperature sensor: semiconductor (0-45 °C) Flow sensor: bi-directional digital turbine

Max volume: 10 l

Flow range: ± 16 l/s

Volume accuracy: ± 3% or 50 ml, whichever is greater Flow accuracy: ± 5% or 200 ml/s, whichever is greater Dynamic resistance at 12 l/s: <0.5 cm H₂O/l/s

Power supply: 9V DC (PP3 battery)

Weight: 180 g (with battery) Made in Italy

WinspiroPRO PC system requirements

(GB, FR, IT, DE, ES, PT,PL, SE, NL, LV, CZ, TR, RU, CN, JP)

Microsoft Windows: Vista, 2000, XP, Me, Seven, 8

- Hard disk space: 160 MB Screen resolution: 1024x768

SPIRODOC® - SPIROMETER AND OXIMETER

Internal software and CD manual: GB, FR, IT, ES, DE, PT (only manual)

SPIROMETER + OXIMETER + 3D ACCELEROMETER IN ONE UNIT

• 33532 SPIRODOC SPIROMETER + SOFTWARE WINSPIRO PRO - bluetooth

33533 SPIRODOC OXIMETER + SOFTWARE WINSPIRO PRO

33534 SPIRODOC SPIROMETER + OXIMETER + SOFTWARE - bluetooth

One touch laboratory for respiratory analysis suitable for professional and personal use.

Complete spirometer ATS/ERS compliant

Specialist-level analysis, screening and Home-care monitoring. It has been developed with various operation modes:

"advanced" parameters for the specialist, "reduced" set of parameters for screening as well as a "simplified" version for Home-care operation. FVC, VC, IVC, MVV, PRE-POST.

Precise spirometry interpretation including post bronchodilator.
All tests are automatically memorized. Automatic BTPS conversion.
Memory capacity: 10.000 tests. Wide selection of predicted values.
Intelligent pulse oximeter with on-screen results
Simple, clear SpO, and Pulse Rate measurements with
plethysmographic curve. During the single six-minute walk test (6

MWT), Spirodoc® estimates the level of oxygen therapy required by the patient. Spirodoc® carries out sleep desaturation studies and memorizes events as well as body position.

3D Accelerometer with motion analysis

Spirodoc® is the first 3D Oximeter® incorporating a triaxial motion sensor to correlate the saturation level (%SpO₂) with physical activity (walk counter, movement analysis and VMU).

Home-care symptoms diary

Fast on-screen symptoms entry. Touch screen with settable questions and automatic answer recording for homecare patient use (eDiary). High performance PC software for spirometry and oximples and screen with settable questions. All tests memorized in Spirodoc® are automatically downloaded into WinspiroPRO and a patient data card is created with a preview of the spirometry curve. WinspiroPRO can easily be connected to a database, EPR, hospital or occupational health system. This software also gives trend graphs of any parameter. All stored tests and curves of every patient can be reviewed on a single page



33534





Easy touch-screen display

FEV1

FEV1% 84.7





Three phase report of 6 minutes walk test: baseline, walk, recovery



Spirometry report



Nocturnal oximetry report with desaturation analysis

and the results, including oximetry tests, can be compared. Supplied with reusable turbine. Multilanguage software: GB, FR, IT, ES, DE, PT, PL, NL SE, CZ, LV, TR, RU, CN, JP.

Central unit

Display: LCD backlit touch screen display 128x64 pixels Power supply: Lithium ion 3.7 V, 1100 mA rechargeable battery with 50 hours measurement back up Accelerometer: Triaxial ±2 g, 400 Hz sampling Dimension and weight: central unit 101x48x16 mm, 99 g removable turbine head: 46x47x24 mm, 17 g Spirometry

Flow sensor: Bi-directional digital turbine

Flow range: ±16 L/s

Volume accuracy: ±3% or 50 mL, whichever is greater Flow accuracy: ±5% or 200 mL, whichever is greater Dynamic resistance at 12 L/s: <0.5 cm H,O/L/s

TECHNICAL SPECIFICATIONS

Temperature sensor: semiconductor (0-45°C) Spirometer measured parameters FVC, FEV1, FEV1/FVC%, FEV3, FEV3/FVC%, FEV6, FEV1/FEV6%, PEF, FEF25%, FEF50%, FEF75%, FEF55% 75%, FET, Estimated Lung Age, Extr. Vol., FIVC, FIV1, FIV1/FIVC%, PIF, VC, IVC, IC, ERV, FEV1/VC%, VT, VE, Rf, ti, te, ti/t-tot, VT/ti, MW measured, MW calculated Oximetry

SpO, range: 0 -100%, ±2% (50-100% SpO,) Pulse rate range: 20-254 BPM, ±2 BPM or 2%

Pulseoximeter measured parameters

SpO₂ [Baseline, Min, Max, Mean], Pulse rate [Baseline,

Min, Max, Mean], T90% [SpO₂<90%], T89%[SpO₂<89%], T88% [SpO₂<88%], T5% [ΔSpO₂>5%], Δindex [12s], SpO₂ events, Pulse rate events [Bradycardia, Tachycardia], Step counter, Movement [VMU], Recording time, Analysis time Sleep analysis

Sieep analysis
Body position, SpO₂ events, Desaturation index (ODI),
Desaturation [Mean Value, Mean duration, Longest
duration, Nadir Peak], ΔSpO₂ [Min Drop, Max Drop],
Total Pulse Variations, Pulse Rate Index, NOD89%
[SpO₂<89%; >5min], NOD4% [SpO₂ Basale-4%;
>5min], NOD90% [SpO₂<90%; Nadir<86%; >5min]

MINISPIR® LIGHT

• 33527 MINISPIR with Winspiro Light Minispir Light measures 10 essential parameters for a diagnostic spirometry: FEV6, FVC, FEV1, FEV1%, PEF, FEF25/75%, FIVC, Lung Age, VC, IVC. Pediatric incentives. Flow/Volume loop and Volume/Time curve. Spirometry test interpretation. Temperature sensor for BTPS conversion.

Minispir Light meets the requirements of integrated healthcare platforms and tablet applications. For use with RESPIRATORY FlowMir disposable turbine only (33507).

Winspiro Light is an intuitive and efficient software, for complete diagnosis

included in Minispir Light.

PC SYSTEM REQUIREMENTS FOR WINSPIRO LIGHT/PRO Microsoft Windows: XP, Vista 32/64 bit, Seven 32/64 bit, 8 Screen resolution: 1024x768 Hard disk: 128 MB (better 256 MB) USB socket Multilanguage: GB, FR, IT, ES, PT, DE, PL, SE, NL, CZ, LV, TR, RU, CN, JP

TECHNICAL SPECIFICATIONS MINISPIR/MINISPIR LIGHT

Temperature sensor: semiconductor (0-45°C) Flow sensor: bi-directional digital turbine Flow range: ± 16 L/s Volume accuracy: ± 3% or 50 mL Flow accuracy: ± 5% or 200 mL/s Dynamic resistance at 12 L/s: <0.5 cm H₂O/L/s Communication port: USB Power Supply: line powered from USB port Dimension: 50x142x26 mm Weight: 65 g

33529 PC not included

TECHNICAL SPECIFICATIONS MINISPIR SpO, SpO₂ range: 0-99% SpO, accuracy: ± 2% tra 70-99% SpO, Pulse Rate range: 30-300 BPM Pulse Rate accuracy: ± 2 BPM or 2%

TESTING

Measured parameters SpO, [Baseline, Min, Max, Mean], Pulse Rate [Baseline, Min, Max, Mean], T90 [SpO₂<90%], T89 [SpO₂<89%], T88 [SpO₃<88%], T5 [ΔSpO₃>5%], Δ Index [12s], SpO₂ Events, Pulse Raté Events [Bradycardia, Tachycardia]

AND MINISPIR®-USB

• 33528 MINISPIR with Winspiro PRO

 33529 MINISPIR+OXYMETER with Winspiro PRO Real time Flow/Volume loop and Volume/time curve with PRE/POST comparison. Advanced spirometry test interpretation. Pediatric incentive animations. Lung Age. Bronchial provocation test including new Mannitol protocol with FEV1 response curve. Temperature sensor for BTPS conversion. Supplied with reusable turbine.

FEV1%, FEV3, FEV3%, FEV6, FEV1/
FEV6%, PEF, FEF25%, FEF50%, FEF75%, FEF25-75%, FET, Vext, Lung Age, FIVC, FIV1, FIV1%, PIF, VC, IVC, IC, ERV, FEV1/
VC%, VT, VE, Rf, ti, te, ti/ttot, VT/ti, MVV.

CD manual GB, FR, IT, ES, DE, PT. Winspiro PRO is a unique

spirometry and oximetry software, which comes standard with

Minispir. All patient records are shown on simple, single-screen patient cards with dynamic management of all data and graphs.

SPARE PARTS AND ACCESSORIES

33507 Flowmir disposable turbine with integrated mouthpiece - box of 60 Adult mouthpieces Ø ext 3 cm - box 33410 of 500 pieces (only for 33526)

33526 Reusable turbine (only for 33528-9)

FOR COMPLETE RESPIRATORY ANALYSIS

SPIROLAB III - DIAGNOSTIC SPIROMETER WITH SPO, OPTION



Quality spirometry, precise measurement The proven MIR digital turbine flow sensor requires no calibration and complies with ATS 24/26 waveforms.

Certified by Dr. Crapo at LDS Hospital, Salt Lake City - Utah



SpO, probe

included with 33522



STANDARD ACCESSORIES

Carrying case Battery charger 1 roll thermal paper Software Winspiro PRO. USB port and cable CD manual: GB, FR, IT, ES, DE, PT

Nose clip Reusable turbine (33526)

33522 Only 1.9 kg for

truly portability

WinspiroPRO software included

BELLEVALE

LV, TR, RU, CN, JP)

(GB, FR, IT, DE, ES, PT, CZ, SE, NL,

- 33521 SPIROLAB III diagnostic spirometer with high resolution colour display, built-in printer and PC WINSPIROPRO software
- 33522 SPIROLAB III same as 33521 with SpO,

A really complete spirometry system:

- FVC, VC with breathing pattern plus MVV tests with real time curves
- over 30 parameters with automatic

interpretation and test quality control

- PRE/POST bronchial response protocol with F/V loop comparison
- up to 8 blows curve on one screen
- internal database for about 6,000 complete tests
- predicted values with various authors
- rechargeable battery plus mains power 220 V, 50-60 Hz (110V on request)
- user-friendly keyboard with dedicated function keys plus alphanumeric data entry
- internal temperature sensor for automatic BTPS conversion
- free upgradable internal software from web, maintaining previously stored data
- selectable multilanguage internal software (GB, FR, IT). Possibility to order also with following internal languages: DE, ES, PL, PT, RU, CN, TR. Finger Oximeter (33522 only)

- short or long term (overnight) SpO, and Pulse Rate measurements
- ODI, NOD, T90%, T89%, T88, T87% oximetry during exercise test
- 33410 ADULT MOUTHPIECES Ø 3 cm ext box of 500 pcs.
- 33492 THERMAL PAPER 112 mm x 25 m
- 33515 SpO₂ PROBE adult spare 33516 SpO₂ PROBE paediatric
- 33525 ANTÍBACTERIAL FILTER disposable box of 50 pcs.
- 33507 DISPOSABLE TURBINE WITH INTEGRATED MOUTH-PIECE - box of 60
- 33524 CONNECTION CABLE MINIFLOWER-SPIROLAB III (532370) - spare
- 33523 CONNECTION CABLE MINIFLOWER-SPIROLAB and SPIROLAB II (532375) - spare

TECHNICAL SPECIFICATIONS 33521-33522

Flow/volume range: ± 16 l/s ±3% or 50 ml Volume accuracy: Flow accuracy: ±5% or 200 ml/s Dynamic resistance: <0.8 cm H₂O/I/s Dimensions: 310x205x65 mm

FVC, FEV1, FEV1/FVC%, FEV3, FEV3/FVC%, FEV6, Parameters: FEV1/FEV6%, PEF, FEF25-75%, FEF25%, FEF50%, FEF75%, FET, Vext, *FVC, *FEV1, *PEF, PIF, FIVC, FIV1, FIV1/FIVC%, VC, IVC, ERV, IC, FEV/VC%, VT, VE, Rf, Ti, Te, Ti/T-tot, VT/Ti, MVV *: Best value

PC System requirements: Windows 2000, ME, XP, Seven, Vista, 8.

Made in Italy.

SP-10 POCKET SPIROMETER



STANDARD ACCESSORIES

Internal lithium battery USB cable PC software (english language) User manual: GB, IT, ES.



33536 SP-10 POCKET SPIROMETER

• 33535 SP-10 POCKET SPIROMETER WITH BLUETOOTH

Pocket, portable spirometer with large TFT screen to clearly display both numbers and flow charts.

Synchronously measure FVC, PEF, FEV1, FEV1%, FEF25, FEF2575, FEF75.

Support diagnosis evidence by volume and flow rate chart display. Built-in predicted values.

Built-in lithium rechargeable battery and battery power display. Supplied with USB cable for PC connection, battery charger and software to calculate data and analyse trend.

33410 ADULT MOUTHPIECES - Ø 3 cm ext. - box of 500 pcs

TECHNICAL SPECIFICATIONS

Max volume: 10 l

Flow range: 2 l/sec - 16 l/sec

Volume accuracy: ±3% or 50 ml whichever is greater Flow accuracy: ±5% or 200 ml/sec whichever is greater Parameters: FVC, FEV1, PEF, FEV1%, FEV25, FEF2575, FEF75

Made in PRC CE 92/42 - EMC group I class B - protection type BF SPIROLAB SPIROMETER: 7" TOUCHSCREEN AND SPO, OPTION



- 33519 SPIROLAB® SPIROMETER WITH 7" TOUCHSCREEN
- 33520 SPIROLAB® SPIROMETER WITH 7" TOUCHSCREEN AND SpO. Fast, simple, durable diagnostic spirometer, made in Italy. Unbeatable features
- FVC, VC, MVV, PRE/POST Bronchodilator comparison with a wide range of selectable parameters
- long life rechargeable battery
- colour Touchscreen 7" display
- direct connection to external USB Printer PostScript
- 10,000 Spirometry tests or 500 hours of oximetry recording
- wireless Real Time test on PC via Bluetooth® 8
- fast and silent built-in B/W printer with customizable printout format
- selectable internal software languages: GB, FR, IT, ES, DE, PT Oximetry option

Available adult and pediatric reusable finger probe. Fast and user friendly

Each function can be activated by a simple touch.

FlowMIR® disposable turbine complies with ATS/ERS standard Totally disposable (mouthpiece, turbine) guarantees 100% hygiene, no cross contamination. No calibration required. Suitable also for pediatric use without need of adaptor.



19024	Con ouche adult consus				
	SpO ₂ probe - adult - spare				
9006 + 19200	SpO ₂ probe - paediatric				
10595	Miniflowmeter with cable - spare				
-	Adult mouthpiece - Ø 30 mm ext box of 500				
-	Thermal paper - 112 mm x 25 m	-			
-	Antibacterial filter - disposable	box of 50			
10004	Disposable turbine with integrated mouthpiece	box of 60			
	19200 10595 - - - 10004	 19200 SpO₂ probe - paediatric 10595 Miniflowmeter with cable - spare - Adult mouthpiece - Ø 30 mm ext - Thermal paper - 112 mm x 25 m - Antibacterial filter - disposable 10004 Disposable turbine with 			

SpO₂ range: 0-99%

SpO, accuracy: ± 2% between 70-99% SpO,

Pulse Rate range: 18-300 BPM

Pulse Rate accuracy: ± 2BPM or 2% whichever is greater

Memory capacity: up to 500 hours oximetry

OXIMETRY PARAMETERS (33520 only)

%SpO $_2$ and Pulse Rate (Min, Max, Average), Test duration, Total SpO $_2$ Events, T90% (SpO $_2$ time \le 89%), T89% (SpO $_2$ time \le 88%), T40 (Bradycardia duration with Pulse Rate <40 BPM), T120 (Tachycardia duration with Pulse Rate >120 BPM)

Suitable for children

Patented pediatric incentive directly on the

WinspiroPRO®

High perfomances PC software for spirometry and oximetry with free update. Multilanguage software: GB, FR, IT, ES, DE, PT, PL, NL, LV, SE, CZ, RU, TR, JP, CN.



Summary of all tests carried out



STANDARD ACCESSORIES

Carrying case Battery charger 1 roll thermal paper Reusable turbine Nose clip

Software WinspiroPRO® USB port and cable SpO, adult sensor (33520 only) CD manual: GB, FR, IT, ES, DE, PT

TECHNICAL SPECIFICATIONS - SPIROMETRY

Power supply: Rechargeable battery Autonomy: approx. 10 hours semiconductor (0-45°C) Temperature sensor: bi-directional digital turbine Flow sensor:

±16L/s Flow range: ±3% or 50mL Volume accuracy: ±5% or 200mL/s Flow accuracy: Dynamic resistance: <0.5 cm H₂O/L/s USB 2.0, Bluetooth® 2.1 Connectivity:

7" colour touch screen LCD, 800x480 resolution

Mouthpieces: Ø 30 mm (1.18 inch) Dimensions: 220x210x51 mm (8,66x8,26x2") Weight: 1450 g (battery pack included) (3,1lb)

Electrical protection: Class II

Display:

Electrical safety standard EN 60601-1 Electromagnetic compatibility EN 60601-1-2

SPIROMETRY PARAMETERS

FVC, FEV1, FEV1/FVC, FEV1/VC, PEF, FEF25, FEF50, FEF75, FEF25-75, FEF75-85, Lung Age, Extrapolated Volume, FET, Time to PEF, FEV0.5, FEV0.5/FVC, FEV0.75, FEV0.75/FVC, FEV2, FEV2/FVC, FEV3, FEV3/FVC, FEV6, FEV1/ FEV6, FEV1/PEF, FEV1/FEV0.5, FIVC, FIV1, FIV1/FIVC, PIF, FIF25, FIF50, FIF75, FEF50/FIF50, VC, IVC, IC, ERV, IRV, Rf, VE, VT, tI, tE, VT/tI, tE/tTOT, MVV (measured), MVV (calculated).

WINSPIROPRO® REQUIREMENTS

Windows 2000, Xp, Vista (32/64 bit), 7 (32/64 bit), 8 and 8.1 (32/64 bit), 10 (32/64 bit). RAM 512 MB

ULTRASONIC, DISINFECTABLE SPIROMETERS

- 33682 OTTHON SPIROMETER US (English) + SOFTWARE
- 33683 OTTHON SPIROMETER IT + SOFTWARE
- 33684 OTTHON SPIROMETER OTHER LANGUAGES + SOFTWARE

Pulmonary function diagnostics and monitoring spirometer for use by general practitioners, respiratory physicians and patients. Compact, mobile, affordable solution for screening COPD (Chronic Obstructive Pulmonary Disease) and asthma.

- automated diagnostic interpretation
- voice and video explain use of device and communicate results
- battery or USB charger
- touchscreen, bright colour high resolution LCD display QVGA (320x240 px), 16 M colours
- external printer connectivity
- automatic internal calibration
- flow tube disinfectable by cold sterilization
- power supply: USB 5 V or built in rechargeable battery Internal software languages: GB, FR, IT, DE, ES, HU, AU, HR. Voice languages available: US (English), AU, FR, IT, DE, ES, AT, HU. Please indicate requested language with order.



• 33688 SPIROTUBE PC SPIROMETER + SOFTWARE

33689 SPIROTUBE B SHOCK AND WATER PROOF PC SPIROMETER + SOFTWARE

PC based pulmonary function diagnostics and monitoring spirometer with ultrasonic Idegen™ respiratory sensor. Suitable for screening COPD and asthma.

- automatic internal calibration
- tele-medical connection via internet
- plug & play USB PC connection detection
- easy upgrade, standard interfaces, XML, HL7
- long-term monitoring for life-long patient support
- pharmaceutical testing subsystem
- flow tube disinfectable by cold sterilization

Spirotube B Edition for harsh conditions

Features an exceptionally robust design for harsh condition and heavy use.

Power supply: USB 5 V. Made in Europe.

STANDARD	ACCESSORIES		
	33682/3/4	33686	33688
Thorsoft software			•
Plastic mouthpieces	•		•
Mini USB cable	•	•	
Cups for disinfection	•	•	•
Battery charger	•	•	
Bacterial filter			•
Carrying bag	•		
Paper manual (GB)	•	:•:	•
CD manual (GB, IT, ES, DE, HU)	•	•	•

TECHNICAL SPECIFICATIONS iple Idegen™ multiple-path

Flow measurement principle 30 mm (OD) Flow tube diameter Dead space 16.8 ml Flow resolution 3 ml/s (33686), 8 mb/s (33682-4, 33688) Flow precision 2% (33686, 33688), 3% (33682-4) Flow range ±18 1/s

USB

MEASURED PARAMETERS

FVC, -FEV*0.5, FEV*0.5/IVC, FEV*0.5/FVC, FEV*1.0/IVC, FEV*1.0/FVC, PEF, FEF*25-75%, MEF*75%, MEF*50%, MEF*25%, FET, MTT, FIVC, FIV*0.5, FEV1/FVC (Tiffeneau index) FIV*1.0, PIF, FIF*25-75%, IRV. ERV, TV, Breath rate value - Insp./Expi ratio: From 1:10 to 10:1



33686 SPIROTUBE MOBILE EDITION BLUETOOTH SPIROMETER

Pulmonary function diagnostics and monitoring spirometer with Bluetooth communication interface and built in rechargeable battery. Suitable for screening COPD and asthma. wireless connection to mobile phones, PDAs, android systems. Real-time measurement with FVC curve visible on the mobile screen

- plug & play USB connection to PC
- automatic internal calibration
- tele-medical connection via Bluetooth
- automated medical interpretation
- long-term monitoring for home care use
- pharmaceutical testing subsystem
- flow tube disinfectable by cold sterilization - software can be freely downloaded

from Google Play Store Made in Europe.



Spirotube mobile edition connects to Android based systems turning these devices into respiratory diagnostic stations



REGISTRATIONS

All spirometers are CE marked and registered in Indonesia, Singapore, Hong Kong, Australia, New Zealand, Korea,

THORSOFT - PULMONARY DIAGNOSTIC PC SOFTWARE Standard medical interfaces (HL7, GDT, BDT, XML). Automatic interpretation module.
Diagnostic decision support system (for general

practitioners and physicians)

Complete stress testing procedure Languages: GB, FR, IT, DE, ES, SE, TR, RO, HU, SL, CZ, HR, NL, KR, CN.

code	ACCESSORIES	Minimum order	
	Instrumed disinfectant concentrate 1 I (Bactericidal, fungidal, virucidal, sporocidal, tubercolocidal) Plastic mouthpieces	box of 10	
	Disposable mouthpieces	box of 100	
	Loki Green single use bacterial filter	box of 50	
33505	Calibration syringe 3 I*		

* Ultrasonic spirometers do not need calibration. Syringe is only for check if requested by law.

Connection to PC

SLEEP APNEA SCREEN METER

33676 SLEEP APNEA SCREEN METER

Suitable for people who have obstructive sleep apneahypopnea syndrome (OSAHS), chronic obstructive pulmonary diseases (COPD), asthma, vascular disease or people over 60 years old. For hospital and home use. Features:

- wrist-design, small in volume and light in weight
- integrate multi-function in one device, convenient to know more physiological information
- displays SpO₂, PR, pulse sound, bar graph
- display of pulse and nasal airflow waveform
- alarm for low-power, finger-out and over-limit
- adjustable screen brightness
- real-time clock
- auto-power on/off
- multi-care record
- record data in continuous 20 hours
- upload data by USB to PC
- PC analysis software
- 33677 RUBBER ADULT SpO, PROBE for day
- 33678 NON-WOVEN SpO, PROBE for night bag of 2
- 34172 NASAL OXYGEN CANNULA

STANDARD ACCESSORIES

Adult, Neonatal disposable SpO, probe Adult SpO, probe Software Manual (GB, IT)

Adapter USB cable Nose-oxygen tube

33676



TECHNICAL SPECIFICATIONS

Nasal airflow measure range: 0-40 rpm ±2 rpm SpO, measuring range: 0-100 % ±2 % (70-100 %), resolution 1% Pulse Rate measuring range: 30-250 bpm ±2 bpm or ± 2% (select the larger) Resistance to surrounding light: The difference between the value

measured in the condition of man-made light and indoor natural light and that of

darkroom is less than ±1 %

Display: 1.8" colour OLED

≤70 mA Power consumption:

Power supply: 3.7 V rechargeable lithium battery Battery working hour: continuously work for more than 20 hours Safety Type: Internally powered, Type BF applied part Dimension of device:

69x50x17.3 mm

100 g (lithium battery included)

BREATHCARE PAP DEVICES: CPAP AND AUTO CPAP

Weight:



- 53700 BREATHCARE PAP DEVICE CPAP
- 53701 BREATHCARE PAP DEVICE CPAP/AUTO CPAP

The breathcare PAP devices take care of patients every night. PAP (Positive Airway Pressure) device works as an air compressor, it constantly blows pressurized air to patient's airway, to prevent airway collapse.

The PAP devices contain CPAP, Auto CPAP and BiPAP. CPAP: Continuous Positive Airway Pressure device

Auto CPAP: Automatic Continuous Positive Airway Pressure device BiPAP: Bi level Positive Airway Pressure device

Improve sleep quality immediately No trauma, safe and comfortable

User friendly with little discomfort

Quiet, noise ≤ 28 dB

Ultra guiet thanks to 4 methods for reducing noise level. Stable 20,000 hours life time.

Comfortable based on years of clinical data it effectively reduces the average treatment pressure and provides a comfortable therapy experience.







Connection with oxygen concentrator to supply oxygen with mask which can help ease symptoms of hypercapnia. Internal software: GB, IT

Supplied with carrying bag, 2 filters, air hose, heated humidifier, breathing hose mask, SD card (only 53701), power adapter, power cable and manual (GB, IT)

53704 AIR SOFT TUBE

53705 BREATHING NOSE MASK

 53706 AIR COTTON FILTER - box of 10 Advised replacement every 2-3 months 53707 CONNECTOR to oxygen concentrator

TECHNICAL SPECIFICATIONS

Treatment mode: CPAP, Auto CPAP (53701 only) 4~20 cm H₂O Pressure range: Pressure accuracy

±0.5 cm H₂O 0~45 min Time-lapse boosting: Alarm protection: face mask fell alarm Operating power: 100-240 V, 50-60 Hz DC 24 V

Automatic altimetric compensation: 3500m USM air circuit system: ultra silence air circuit system

noise removal technology 3A self adapting frequency adjustment technique Size - weight: 27x13.5xh 10 cm - 1.5 kg





3705



















